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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,681	10/28/2003	Brian Peter Belliveau	202ES057A	3932
37535	7590	06/15/2006	EXAMINER	
NOVEON IP HOLDINGS CORP. 9911 BRECKSVILLE ROAD CLEVELAND, OH 44141-3247			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,681

Applicant(s)

BELLIVEAU ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-22, 24, 25 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) 27-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-22, 24, 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/27/2006 has been entered.
2. Claims 1-3, 6-22, 24-25, and 27-36 are currently pending in this application. Claim 6 has been canceled. Claim 1 has been amended.
3. Claims 27-36 have been withdrawn with traverse as indicated in the Office action of 10/19/2004.
4. The 103(a) rejection of the claims in the prior Office action is maintained as follows.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 1-3, 6-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaillancourt (US Pat. 4,798,597) alone or in view of Kitou et al. (US Pat. 5,993,436), and evidenced by Teffenhart (US Pat. 4,789,720).

Vaillancourt discloses a medical tube, comprising an outer layer and an inner layer (see abstract; col. 2, ln. 1-8). The outer layer is made of polyether polyurethane resin, having a Shore

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hardness of 60A-80A. The inner layer is made of a polyurethane resin containing glycol chains, having a Shore hardness of 50A (see col. 2, ln. 23-30, 39-56). Note that Vaillancourt also teaches the inner layer polyurethane is a hydrophilic polyurethane made by Tyndale Plains-Hunter (col. 3, ln. 48-54), which is a polyether polyurethane as evidenced by Teffenhart.

Vaillancourt differs from the presently claimed invention in that the reference does not teach one of the layers to have a Shore hardness of about 95A to about 85D.

However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that the degree of hardness of a layer would have been determined by adjusting parameters, such as thickness of the layer and the amounts of the hard and soft segments in the polyurethane, in order to obtain the desired properties.

Kitou discloses a catheter tubing, comprising a polycarbonate (or polycaprolactone) polyurethane having a Shore hardness of 60D or higher to improve kinking resistance (see abstract; Examples).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the polyurethane, as taught by Kitou, in the layers of Vaillancourt, for the purpose of having a medical tube with enhanced kinking resistance as well as being stiff for ease of insertion and pliability after intubation.

With respect to the medical tube having a second hard layer, although the Vaillancourt combination is silent with respect to additional hard layers, it would have been obvious to one of ordinary skill in the art that duplication of a layer would not have significant patentable weight, since multiplicity would have enhanced the desired capacity and properties.

Response to Arguments

7. Applicant's arguments filed on 3/27/2006 have been fully considered but they are not persuasive.

In response to Applicants' remark that the inner tube layer of Vaillancourt is a softer layer than the presently claimed layer, it is noted that the inner layer polyurethane of Vaillancourt is a hydrophilic polyurethane made by Tyndale Plains-Hunter (col. 3, ln. 48-54), which is a polyether polyurethane as evidenced by Teffenhart, which is the same as presently claimed. Concerning the degree of hardness of the polyurethane, it is the examiner's position that the hardness of polyurethane would have been obtained by adjusting the amounts of the hard and soft segments in the polyurethane.

Applicants contend that the invention of Kitou includes strips of x-ray opaque agent in the tube, thus it is not commensurate with the claim language of "consisting essentially of". However, it does not appear that the addition of the opaque agent would alter the properties of the polyurethane composition. Applicants are recommended to provide factual evidence to prove that additional elements are detrimental to the properties of the composition.

Thus, the combination of Vaillancourt and Kitou is proper.

Contact Information

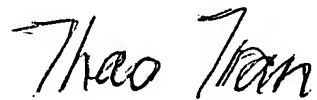
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tt
June 09, 2006



THAO T. TRAN
PATENT EXAMINER